Claims

What is claimed is:

1. A system for regulating resource consumption in a computer system used for utility work and production work, the apparatus comprising:

5   an arrangement for determining the utilities within the system;

an arrangement for deriving a throttling level for each utility which quantifies the reduction in the rate at which the utility consumes resources; and

an arrangement for enforcing the derived throttling level for each utility.

2. The system according to Claim 1, wherein said arrangement for determining

10   ascertains whether the utility has indicated its presence with the system.

3. The system according to Claim 2, wherein indicating the presence of the utility within the system comprises the utility registering with a utility manager.

4. The system according to Claim 2, wherein said arrangement for enforcing the throttling level is implemented within the utility.

5. The system according to Claim 4, wherein the throttling level is enforced through a self-imposed sleep.

6. The system according to Claim 4, wherein the utility is a multi-process utility and the throttling level is enforced by reducing the parallelism of the multi-processes.

7. The system according to Claim 4, wherein the throttling level is enforced by reducing the amount of memory used by the utility.

8. The system according to Claim 4, wherein the throttling level is enforced by changing the granularity of locking.

9. The system according to Claim 4, wherein the throttling level is enforced by reducing the amount of processing accomplished by the utility.

10. The system according to Claim 2, wherein said arrangement for enforcing the throttling level is implemented by an agent external to the utility.

11. The system according to Claim 9, wherein the throttling level is enforced by reducing the operating system priority of the utility.

12. A method for regulating resource consumption in a computer system used for utility work and production work, the method comprising the steps of:

determining the utilities within the system;

deriving a throttling level for each utility which quantifies the reduction in the rate at which the utility is processed or otherwise consumes resources; and

enforcing the derived throttling level for each utility.

13. The method according to Claim 12, wherein said determining step comprises ascertaining whether the utility has indicated its presence with the system.

14. The method according to Claim 13, wherein indicating the presence of the utility within the system comprises the utility registering with a utility manager.

15. The method according to Claim 13, wherein said enforcing step comprises the throttling level being implemented within the utility.

16. The method according to Claim 15, wherein the throttling level is enforced through a self-imposed sleep.

17. The method according to Claim 15, wherein the utility is a multi-process utility and the throttling level is enforced by reducing the parallelism of the multi-processes.

18. The method according to Claim 15, wherein the throttling level is enforced by reducing the amount of memory used by the utility.

19. The method according to Claim 15, wherein the throttling level is enforced by changing the granularity of locking.

5   20. The method according to Claim 15, wherein the throttling level is enforced by reducing the amount of processing accomplished by the utility.

21. The method according to Claim 13, wherein said enforcing step is accomplished by having an agent external to the utility implement the throttling level.

22. The method according to Claim 21, wherein the throttling level is enforced by

10   lowering the operating system priority of the utility.

23. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for regulating resource consumption in a computer system used for utility work and production work, the method comprising, said method comprising the steps of:

15   determining the utilities within the system;

deriving a throttling level for each utility which quantifies the reduction in the rate at which the utility consumes resources; and

enforcing the derived throttling level for each utility.